

AGS OPERATIONS PROCEDURES MANUAL

8.16.6 Linac Chilled Water System

Text pages 1 through 2

Attachment

Hand Processed Changes

| <u>HPC No.</u> | <u>Date</u> | <u>Page Nos.</u> | <u>Initials</u> |
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Revision No. 00

Approved: _____
AGS Department Chairman Date

8.16.6 Linac Chilled Water System

1. Purpose

To provide operating instructions for Plant Engineering, Refrigeration and Air Conditioning Engineers for the Linac chilled water system.

2. Responsibilities

Plant Engineering, Refrigeration, and Air Conditioning Engineers start and stop this system.

3. Prerequisites

- 3.1 Startup - Coordinate with Mechanical Services.
- 3.2 Verify that cooling tower system is operating.
- 3.3 Shutdown - Coordinate with Mechanical Services and request permission from Linac control.
- 3.4 Qualified and trained Plant Engineering, Refrigeration and Air Conditioning Engineers.

4. Precautions

- 4.1 Pumps - Do not operate pumps without water or with valves closed.
- 4.2 Chiller - Do not operate without tower and chilled water circulation.

5. Procedures

- 5.1 Verify that water level is within operating limits as marked on the chilled water expansion tank sight glass.
- 5.2 Open suction and discharge valves on select pump.
- 5.3 Roll pump shaft by hand.
- 5.4 Turn on chilled water pump circuit breaker.
- 5.5 Start pump at local start/stop station.

- 5.6 Check system pressure (60 - 80 psi) and temperature 45-50°F with chiller on) for proper settings and operation.
- 5.7 Observe pump operation and restore alarms.
- 5.8 Verify that the oil level (1/2 full) and temperature (130°F) of the selected chiller compressor is within normal limits as indicated on the compressor sight glass and temperature indicator.
- 5.9 Turn on chiller disconnect switch.
- 5.10 Place the chiller auto purge system in automatic with local purge switch.
- 5.11 Start chiller with local start switch on microprocessor. Chiller should start in approximately 4 minutes.
- 5.12 Observe chiller operation and log all pressure and temperature.
- 5.13 For shutdown, turn off chiller at microprocessor and wait for delayed shutdown. Turn off chilled water pump, close suction and discharge valves, and secure alarms.
- 6. Documentation
 - 6.1 Fill in "Manufacturer's Operating Log" for Linac chilled water system.
- 7. References
 - 7.1 Linac flow diagram, C.T. Main Drawing #2484-402-M2. Carrier startup, operations, and maintenance instruction manual.
- 8. Attachments
 - 8.1 AGS-OPM-ATT 8.16.6.a, "Manufacturer's Operating Log".